UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,972	10/02/2003	Yacine El Mghazli	Q77793	6295

23373   7590   04/28/2008
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER
KEEFER, MICHAEL E

ART UNIT	PAPER NUMBER
2154	

MAIL DATE	DELIVERY MODE
04/28/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/675,972	EL MGHAZLI ET AL.
	Examiner	Art Unit
	MICHAEL E. KEEFER	2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 January 2008*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-14* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

1.   This Office Action is responsive to the Amendment filed 12/19/2007 and entered

on the filing of an RCE on 1/22/2008.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-11 and 13-14 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Wittmann et al. (AMnet: Active Multicasting Network), hereafter

Wittmann, in view of in view of Eichert et al. (US 6393474), hereafter Eichert in view of

Alexander et al. "Active Network Encapsulation Protocol (ANEP)", hereafter ANEP.

    Regarding **claims 1 and 9-11**, Wittmann discloses:

    A method for reserving resources in a packet communication network,

preferably an IP protocol network, this network being a hybrid network

comprising both active nodes and passive nodes, the active nodes alone being

capable of taking into account so-called active packets, that is to say those

containing information related to a corresponding execution environment of these

active nodes, an active data flow being a set of active packets having to be taken

into account by one and the same execution environment (this network is

disclosed in Fig. 1 as well as the first paragraph of section 2.1, and that it is an IP

network containing IP nodes), the said method comprising the steps of:

a) sending on the network of a reservation packet containing a request for

reservation of resources constituting an execution environment for an associated

active data flow; (See Fig. 3, note the RSVP message with the QF Object inside)

b) receiving of the said reservation packet by an active node of the

network (Fig. 3 shows the RSVP message being received at the RSVP Daemon);

and

c) reservation of resources of the node according to the said request,

(Note that in Fig. RVSP Daemon forwards the QF Object to the QF Daemon,

which then programs the QoS Filter according to the QF object thereby reserving

the filtering resources)

the said method being characterized in that the said reservation packet is an

active packet. (The RSVP packet containing the QF Object is by definition active

as it will program the QoS filters within an active node. Packets carrying

information intended for an active node are active packets. It is clear that the QF

Object is information intended for an active node.)

Note that Figure 3 is the diagram of an IP active node operable to perform

the steps above.

Wittmann discloses all of the limitations of claim 1 except for an indicator that

indicates that the active packet comprises executable code or identifies a server

from which an executable code is downloadable.

The general concept of an active node receiving code in an active packet

reserving policy is well known in the art as taught by Eichert. (Col. 2, line 65

through Col. 3 line 1 which teaches that the active packet file may contain the policy code executable by the active network devices.)

The general concept of a policy reservation packet identifying a server and code to download and execute from the server is well known in the art as taught by Eichert. (Col. 2, lines 60-67, Col. 3 lines 1-3 teach that the code in the active packet may be stored on a distributed database and the active packet may just inform the device where the packet may be found.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of reserving resources of Wittmann and the general concept of an active node receiving code in an active packet reserving policy as taught by Eichert in order to decouple the policy services from the underlying node infrastructure.

Wittmann and Eichert teach all the limitations of claim 1 except that the packet has an indicator that the packet is active (i.e. that it contains executable code).

The general concept of a packet containing code to have an indicator of that state is well known in the art as taught by ANEP, which discloses a protocol which is used to encapsulate active information within an IP packet.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Wittmann and Eichert to use the ANEP in order to allow co-existence of different execution environments and proper demultiplexing of received packets.

Regarding **claim 2 as applied to claim 1**, Wittmann discloses:

the packet is in RSVP format. (Pg. 897, Col. 2, Section 3, lines 5-6 state

that Amnet is based on RSVP.)

Regarding **claim 3 as applied to claim 1**, Wittmann discloses:

the packet may be a PATH type of the RSVP protocol. (Page 899, Col. 1,

Paragraph 7: "A soft state is created and periodically refreshed by PATH or

RESV messages. QF objects are included in these messages.)

Regarding **claim 4 as applied to claim 1**, Wittmann discloses:

the reservation packet comprises an identifier of the said active data flow.

(Page 889, Col. 1, "different filters serve different group members in the same

active network node", and "User data are directed directly to the corresponding

QoS filter" clearly imply that there is a designation of a specific flow (i.e. to a

specific group or member) that is to receive the filtering described by the QF

object See Figure 4 (b) How Node D provides different quality data flows to

separate receivers. Furthermore in an RSVP PATH packet inherently (See RFC

2205, the defintiion of RSVP for more information) includes a Sender Template

which describes the a filter spec that is used to select the proper packets from all

the packets sent on the network.)

Regarding **claim 5 as applied to claim 1**, Wittmann discloses:

the said reservation packet is provided for containing parameters for

processing data contained in the said associated active data flow, this processing

being a code executable by an active node of the network, (see Fig. 2, which

shows the format for the parameters for processing the data in the data flow) and

in that, in the case of these processing parameters being present, the step b) is

followed by:

b 1) a step of loading by the said active node of the said corresponding

executable code (See Fig. 3, the QF Daemon loads and configures the

appropriate QoS-filters); and

b2) a step of execution of the said code by the said active node. (The

filters are executed upon members of the group data flow that was reserved. See

Fig. 3)

Regarding **claim 6**, Eichert teaches:

The general concept of an active node receiving code in an active packet

reserving policy is well known in the art as taught by Eichert. (Col. 2, line 65

through Col. 3 line 1 which teaches that the active packet file may contain the

policy code executable by the active network devices.)

Regarding **claim 7**, Eichert teaches:

The general concept of a policy reservation packet identifying a server and

code to download and execute from the server is well known in the art as taught

by Eichert. (Col. 2, lines 60-67, Col. 3 lines 1-3 teach that the code in the active

packet may be stored on a distributed database and the active packet may just

inform the device where the packet may be found.)

Regarding **claims 8 and 13 and as applied to claims 1 and 5**, Wittmann

discloses:

after the step bl), a step of: b3) sending on the network by the said node of a

confirmation of loading of the said executable code. (This step is inherent, as in the

RSVP protocol when a node is finished with the setup requested by a PATH or

RESV message then the message is forwarded onto the next node on the path. In

the case of a failure, an error message is then forwarded in the opposite direction. If

the node is unable to load the proper filters (i.e. executable code), the RSVP request

will fail, and the error message will be returned to the originator of the PATH

message. If the node is successful in reserving the resources (i.e. the filters

necessary) then the path message is forwarded to the next node, thus the

continuance of the PATH message to be forwarded means that the request

succeeded at the previous nodes.)

Regarding **claim 14 as applied to claim 1**, Wittmann discloses:

The reservation packet comprises: a first identifier identifying the protocol for the

data flow, a second identifier identifying the source/destination of the data flow, and

a third identifier identifying the resources to be reserved. (An RSVP reservation

request includes the destination of the dataflow. Fig. 2 discloses that the QF filter

contains a protocol (In Fig. 2(b) the C-type is used to identify the video protocol used

in the data flow) and also the resources to be used (slices per frame, whether to use

color or black and white, the quality filter to provide)).

4.   **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over
Wittmann, Eichert, and Alexander as applied to claim 1 above, and further in view of
Applicant's Admitted Prior Art.

Wittmann discloses all the limitations of claim 12 except for a flag in the header
of a packet that indicates that the packet is active or passive.

The general concept of using a flag in the header to indicate whether a packet is
active or passive is old and well known in the art, as taught by Applicant's Admitted
Prior Art. (See Applicant's Specification page 1 lines 29-33)

It would have been obvious to one of ordinary skill in the art at the time of the
invention to combine Wittmann with the general concept of using a flag in the header to
indicate whether a packet is active or passive in order to expedite the processing of
flows that do not require quality filters.

Response to Arguments

5.   Applicant's arguments with respect to claims 1-14 have been considered but are
moot in view of the new ground(s) of rejection.

The Examiner will address the arguments that are not moot in view of the new
rejections above.

First, Applicant argues that Wittmann does not disclose the limitations of
claim 3. The Examiner disagrees; as cited by Applicant in the last paragraph of
page 7 of the arguments, Wittmann discloses that the RSVP (Resource
ReSerVation Protocol) has two different types of packets, RESV packets and
PATH packets. (This is also illustrated in RFC 2205, the definition of the RSVP

protocol which Applicants have submitted previously in an IDS, and is in the file wrapper of this case.) Wittmann discloses using PATH packets to disseminate QC information to the nodes.

Second, Applicant argues that Wittmann does not disclose the limitations of claim 4. The Examiner disagrees, as stated in the above rejection of claim 4. RSVP PATH messages include sender templates which identify which packets the reservation is for. (See RFC 2205, at least page 20, "Sender Template")

Third, Applicant argues that the combination of Wittmann and Eichert fails to suggest that reservation packets can contain active data (i.e. that RSVP packets can have executable code in them.) Applicant's reasoning is that because Wittmann does not disclose packets with executable code, and that because Eichert does not disclose reservation packets, that the combination of the references would not lead one of ordinary skill in the art to combine reservation packets with the concept of having policy code distributed through active packets. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL E. KEEFER whose telephone number is

(571)270-1591. The examiner can normally be reached on Monday through Friday

9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MEK 4/25/2008

/Nathan J. Flynn/
Supervisory Patent Examiner, Art Unit 2154